



Australian Government

HLTANA007 Monitor medications in the anaesthetic environment

Release: 1

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Modification History

Release	Comments
Release 1	This version was released in <i>HLT Health Training Package release 2.0</i> and meets the requirements of the 2012 Standards for Training Packages. Significant changes to the elements and performance criteria. New evidence requirements for assessment, including volume and frequency requirements. Significant change to knowledge evidence.

Application

This unit describes the skills and knowledge required to access and prepare medications, fluids, blood and blood products prescribed by the anaesthetist, to monitor client responses.

The unit applies to anaesthetic technicians working under the direction of, and in consultation with, an anaesthetist in any hospital or day surgery setting.

The skills in this unit must be applied in accordance with Commonwealth and State/Territory legislation, Australian/New Zealand standards and industry codes of practice.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements define the essential outcomes</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element</i>
1. Access medications	1.1 Access medications when directed by anaesthetist or other health professional 1.2 Follow legal and organisation procedures to obtain drugs 1.3 Identify indication of medication
2. Prepare medications for administration	2.1 Read client records for information that may impact medication administration 2.2 Communicate details from client records to

ELEMENT	PERFORMANCE CRITERIA
<i>Elements define the essential outcomes</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element</i> anaesthetist or health professional 2.3 Accurately measure, calculate and confirm medication dosages as directed by health professional and in accordance with requirements for specific medications 2.4 Aseptically prepare and correctly label intravenous drugs 2.5 Program infusion device and confirm program with second authorised person 2.6 Safely dispose of waste and sharps
3. Monitor and record client responses	3.1 Identify adverse client responses and report to anaesthetist 3.2 Recognise and respond to acute and delayed adverse reactions to drugs within role of responsibility 3.3 Accurately record responses
4. Store medications	4.1 Secure, restock and store medications according to law and health care environmental policy 4.2 Identify and dispose of date expired medications 4.3 Complete accurate drug documentation
5. Prepare for and administer intravascular fluid, blood or blood products	5.1 Access and select intravascular solution, blood or blood product according to prescription 5.2 Confirm selected solution is fit for use 5.3 Select infusion set, connectors and/or filters 5.4 Assemble equipment and materials and prime in an aseptic manner ready for use 5.5 Program equipment according to prescription and confirm client identity with another authorised person 5.6 Administer and monitor infusion and infusion site 5.7 Store infusion equipment and solutions correctly

Foundation Skills

The Foundation Skills describe those required skills (language, literacy, numeracy and employment skills) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Unit Mapping Information

No equivalent unit.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=ced1390f-48d9-4ab0-bd50-b015e5485705>

Assessment Requirements for HLTANA007 Monitor medications in the anaesthetic environment

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Performance Evidence

The candidate must show evidence of the ability to complete tasks outlined in elements and performance criteria of this unit, manage tasks and manage contingencies in the context of the job role. There must be evidence that the candidate has:

- accessed, prepared and monitored medications, fluids, blood and blood products in accordance with legislation and the organisation's medication and delegation policies and practice under the supervision of a health professional on at least 10 different occasions
- administered crystalloids, colloids, blood & blood products
- programmed infusion devices at least twice
- set up rapid infusion device at least twice
- prepared drugs for administration via each of the following routes at least twice:
 - inhalational
 - intravenous
 - intramuscular
 - oral
 - subcutaneous
 - topical

Knowledge Evidence

The candidate must be able to demonstrate essential knowledge required to effectively complete tasks outlined in elements and performance criteria of this unit, manage tasks and manage contingencies in the context of the work role. This includes knowledge of:

- legal and ethical considerations (national, state/territory) for the handling and administration of medications, and how these are applied in organisations:
 - approved drug and fluid abbreviations
 - Australian and New Zealand scheduling for drugs and poisons
 - Australian and New Zealand Society of Blood Transfusion guidelines (ANZSBT)
 - codes of practice
 - records management requirements
 - storage
 - work role boundaries – responsibilities and limitations
 - rights and responsibilities of workers, employers and clients
 - work health and safety (WHS)
- pharmacology for drugs commonly used in anaesthesia, including:
 - sources of drugs (natural/endorphins/synthetic)
 - drug nomenclature (chemical/generic/brand names)
 - drug classifications
 - common abbreviations
 - pharmacodynamics - drug receptor interactions/dose-response relationships/therapeutic index
 - pharmacokinetics (ADME) absorption/distribution/metabolism/excretion
 - pharmacotherapeutics
 - adverse drug reactions and interactions
 - toxicity/toxicology
- drug administration routes:
 - enteral medication – endotracheal, sublingual, buccal, rectal, vaginal, urethral
 - parenteral medication - intravenous, intramuscular, intraosseous, intracardiac, intraarticular, intrauterine, intrathecal, subcutaneous, intra-arterial, inhalational
 - topical medication - subcutaneous, transnasal, transdermal, ocular, inhalational, aural
- formulations, including
 - wafers
 - tablets
 - lozenges
 - capsules
 - elixir
 - suspension
 - solutions
 - creams
- major drug groups used in anaesthesia - presentation, formulation, indication, mode of action, system of delivery and administration routes, precautions, side effects, contraindications and adverse reactions, storage requirements, factors influencing drug actions, dosage variations for different types of clients for all of the following:
 - inhalational induction agents

- intravenous induction agents
- analgesics
- non steroidal anti-inflammatory drugs (NSAID)
- anti-emetics
- muscle relaxants
- respiratory medications
- anticoagulants
- local anaesthetics
- antibiotics
- cardiovascular medication, including diuretics
- electrolytes
- drugs used in the management of the following conditions (which may complicate or co-exist with anaesthesia):
 - adrenal dysfunction
 - anaphylaxis
 - angina
 - bronchospasm
 - cardiac arrest
 - cardiac arrhythmias
 - congestive heart failure
 - coagulopathies
 - deep vein thrombosis
 - endocrine dysfunction
 - hypoglycaemia
 - hypotension
 - hyperglycaemia
 - hypertension
 - pulmonary oedema/embolism
 - raised intracranial/intra-ocular pressure
 - respiratory depression/compromise
 - stroke
 - seizure
 - uterine atony
- methods of drug preparation, including:
 - dilutions
 - reconstitutions
- factors to consider when calculating medication dosages including:
 - calculation formulae
 - calculation of dosages of injectable drugs (liquid, solid, unit dosages)
 - flow rate drops per minute

- flow rate millilitres per hour
- duration of infusion
- paediatric dosage calculations (body weight, surface area, age related dose reduction)
- geriatric dosage calculations (body weight, surface area and age)
- methods of storage and handling of medication
- equipment for administration of medications, including:
 - volumetric pumps
 - syringe drivers
 - consumables
- infusion products and equipment:
 - rapid infusers
 - warming devices
 - burettes
 - infusion sets and attachments
 - blood and blood products
 - crystalloids
 - colloids
- massive transfusion protocol
- emergency medical management of anaphylaxis and adverse drug/fluid reactions

Assessment Conditions

Skills must have been demonstrated in the workplace or in a simulated environment that reflects workplace conditions. The following conditions must be met for this unit:

- use of suitable facilities, equipment and resources, including:
- manufacturer's instructions
- organisation policies and procedures
- MIMS
- Australian & New Zealand Society of Blood Transfusion (ANZSBT)
- Australian and New Zealand College of Anaesthetists (ANZCA)
- medications
- modelling of industry operating conditions, including presence of situations requiring problem solving in non-routine situations

Assessors must satisfy the Standards for Registered Training Organisations (RTOs) 2015/AQTF mandatory competency requirements for assessors.

Links

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